

CLAIMS

What is claimed is:

- 1 1. A method of operating an enclosure by use of a remote computing system, wherein
2 the enclosure is located at a customer residence and the enclosure is coupled to a local
3 microcontroller, the local microcontroller in communication with the remote computing
4 system via a network connection, the method comprising:
5 receiving a tracking number at the remote computing system, the tracking number
6 corresponding to a package to be delivered to the enclosure;
7 in response to receiving the tracking number, downloading the tracking number
8 from the remote computing system to the microcontroller via the network connection;
9 saving the tracking number in a local memory in the microcontroller;
10 scanning a bar code on the package at a scanner coupled to the controller;
11 transforming the bar code to a checksum;
12 comparing the checksum to the tracking number in the local memory;
13 if the checksum matches the tracking number, opening a lock on the enclosure for
14 delivery of the package, the lock operably coupled to the controller
- 1 2. The method of claim 1, wherein the network connection is an internetwork
2 connection.
- 1 3. The method of claim 2, wherein the internetwork connection employs a VSAT
2 medium.
- 1 4. The method of claim 1, wherein the scanner is physically located at the enclosure.
- 1 5. The method of claim 4, wherein the enclosure includes a transponder, the
2 transponder in communication with the microcontroller.

22. The method of claim 21, further comprising:

after opening the automated lock, printing a receipt at the printer, the receipt confirming delivery of the package at the enclosure.

23. A method of operating an enclosure by use of a remote computing system, the enclosure secured by an automated lock operably coupled to a local microcontroller, the remote computing system in communication with the microcontroller via a network connection, wherein the enclosure includes a bar code scanner operably coupled to the microcontroller, the method comprising:

scanning a bar code printed on a label affixed to a package to the bar code scanner; communicating the bar code from the scanner to the microcontroller; receiving the barcode at the remote computing system from the microcontroller via the network; in response to receiving the barcode, comparing the barcode at the remote computing system to a tracking number for the package; in response to comparing the barcode, sending an activation command from the computing system to the microcontroller via the network; opening the lock in response to the command for delivery of the package.

24. The method of claim 23, wherein the network is an internetwork.

25. The method of claim 24, wherein the internetwork operates over a VSAT link.

26. The method of claim 24, wherein the internetwork operates over a fiberoptic link.

27. The method of claim 23, wherein the network is a publicly switched telephone network.

28. The method of claim 23, further comprising:

in response to the activation command, opening the lock by use of the microcontroller for delivery of the package.

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1 29. The method of claim 28, further comprising:

2 after opening the lock, printing a confirmation of delivery on a printer affixed to
3 the enclosure.

1 30. A method of operating a storage device for the delivery and pick-up of goods, the
2 storage device including an automated lock operably coupled to a local microcontroller
3 fixed to the storage device, the microcontroller in communication with a remote
4 computing system via a wide area network, the method comprising:

5 sending a request from the microcontroller to the remote computing system to
6 receive a plurality of codes, each of the plurality of codes identifying a different company
7 from a plurality of delivery companies;

8 in response to the request, downloading the plurality of codes from the remote
9 computing system to a microcontroller from a remote computing system;

10 receiving a delivery company code at an input device locally coupled to the storage
11 device;

12 searching for the delivery company code against the plurality of codes in the
13 microcontroller;

14 if the searching for the delivery company code is successful, opening the
15 automated lock by use of the microcontroller.

1 31. The method of claim 30, wherein the input device is one of a keyboard, a smart
2 card reader, a radio receiver, an infrared scanner, a laser based scanner.

1 32. The method of claim 30, wherein the wide area is an internetwork.

1 33. The method of claim 32, wherein the internetwork operates over at least one of a
2 VSAT link and a fiber optic network.

1 34. The method of claim 30, wherein the wide area network is a publicly switched
2 telephone network.

1 42. A storage device for the delivery and pick-up of goods, the storage device
2 comprising:

3 a plurality of enclosures for receiving and securing the goods, at least a portion of
4 the enclosures being located at different drop-off sites, each of an enclosure including a
5 locking mechanism and input device for unlocking the enclosure;

6 a host system including a server, a database and a memory in communication with
7 the plurality of enclosures, the host system being located remotely from the plurality of
8 enclosures, the host system providing an activation to lock each enclosure when a product
9 code unique to a purchased product is matched with an identifier code located on the
10 purchased product

11 wherein at least a first portion of the plurality of enclosures are located at home
12 locations of customers.

1 43. The device of claim 42, wherein at least a second portion of the plurality of
2 enclosures are located remotely from the home locations of customers.

1 44. A storage device for the delivery and pick-up of goods, the storage device
2 comprising:

3 a plurality of enclosures for receiving and securing the goods, at least a portion of
4 the enclosures being located at different drop-off sites, each of an enclosure including a
5 locking mechanism and input device for unlocking the enclosure;

6 a host system including a server, a database and a memory in communication with
7 the plurality of enclosures, the host system being located remotely from the plurality of
8 enclosures, the host system providing an activation to unlock each enclosure when a
9 product code unique to a purchased product is matched with an identifier code located on
10 the purchased product.

49. A storage device for the delivery and pick-up of goods, the storage device comprising:
a plurality of enclosures for receiving and securing the goods, at least a portion of the enclosures being located at different customer dwelling sites, each of an enclosure including a locking mechanism, an input device for unlocking or locking the enclosure and an enclosure memory;

a host system including a server, a database and a memory in communication with the plurality of enclosures, the host system being located remotely from the plurality of enclosures, the host system providing an activation to unlock or lock each enclosure when one of when a product code associated with a purchased product is matched with an identifier code located on the purchased product, wherein the host system downloads a product code or a delivery company identifier of a delivery company to the enclosure memory to unlock or lock the enclosure and is matched with an identifier code of the delivery company or a product code unique to a purchased product at the customer dwelling site.

50. A product delivery system, comprising:
a host system including at least one host system server with a host system memory;
a customer interface coupled to the host system;
wherein the host system provides a delivery company identifier to a customer that authenticates a delivery company as authorized to deliver products to a customer pick up site.

51. The system of claim 50, wherein the delivery company identifier is an alphanumeric code, a barcode, a smartcard, a handheld device.

52. The system of claim 51, wherein the product is product purchased through the internet, a product purchased by mail order.

53. The system of claim 52, wherein the host system further provides a verification of product delivery to the customer pick up site.

54. The system of claim 53, wherein the verification of product delivery to the customer pick up site is received by the delivery company.

- 1 55. The system of claim 54, wherein receipt of verification of product delivery by the
2 delivery company is by the host system.
- 1 56. The system of claim 54, wherein receipt of verification of product delivery to the
2 delivery company is at the customer pick up site by the delivery company.
- 1 57. The system of claim 54, wherein the receipt of verification to the delivery
2 company at the customer pick up site is with a handheld device.
- 1 58. The system of claim 54, wherein the receipt of verification to the delivery
2 company at the customer pick up site is with a physical receipt.
- 1 59. A method of determining a delivery address for a purchase product, comprising:
2 providing a host system coupled to one or more retail site system, the host system
3 including a database with a plurality of delivery addresses;
4 inputting a requested delivery address for a purchaser by the retail site;
5 determining at least one collection point for the requested delivery address by the
6 host system;
7 calculating a delivery fee for each collection point by the host system.
- 1 60. The method of claim 59, further comprising:
2 sending the purchaser a list of collection points and fees for each collection point.
- 1 61. The method of claim 60, further comprising:
2 determining at the host system if the purchaser is registered in the database.
- 1 62. The method of claim 61, wherein registration of the purchaser requires a contact
2 point for the purchaser.
- 1 63. The method of claim 61, wherein registration of the purchaser requires a unique
2 identifier of the purchaser.
- 1 64. The method of claim 61, further comprising:
2 completing a purchase transaction for the product with the seller and designating a
3 selected delivery site and price received from the host system.

- 1 75. A method of determining a delivery address for a purchase product, comprising:
2 providing a host system coupled to one or more retail site systems, the host system
3 including a database with a plurality of delivery addresses;
4 inputting a requested delivery address for a purchaser by the retail site;;
5 determining at least one collection point for the requested delivery address by the
6 host system;
7 calculating a delivery fee for each collection point by the host system;
8 wherein the host system includes a list of couriers.
- 1 76. The method of claim 75, further comprising:
2 sending the purchaser a list of collection points and fees for each collection point.
- 1 77. The method of claim 76, further comprising:
2 determining at the host system if the purchaser is registered in the database.
- 1 78. The method of claim 77, wherein registration of the purchaser requires a contact
2 point for the purchaser.
- 1 79. The method of claim 77, wherein registration of the purchaser requires a unique
2 identifier of the purchaser.
- 1 80. The method of claim 77, further comprising:
2 completing a purchase transaction for the product with the seller and designating a
3 selected delivery site and price received from the host system.
- 1 81. The method of claim 80, further comprising:
2 locating the purchased item by the seller.
- 1 82. The method of claim 81, further comprising:
2 generating a tracking identifier for the purchased item by the host system.

